

SEEZAK

For Research & Development

PRESENTS

A "NEW" METHOD

of SELECTING and MIXING



EPOXY
RESINS
and
BONDING
ADHESIVES

THE SEEZAK EPOXY KIT

All RESINS and BONDING ADHESIVES

With their Correct CURING AGENTS

are PRE-WEIGHED and PRE-MEASURED

All Ready to Mix

SeeZak

**SEEZAK PRODUCTS, INC.
EPOXY PRODUCTS DIVISION**

5057 West Washington Boulevard
Los Angeles, California 90016
Telephone (213) 939-3129

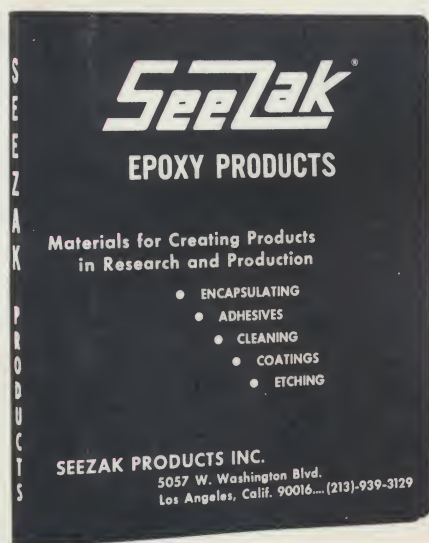


EPOXY KIT RESINS BONDING ADHESIVES

COMPLETE EPOXY KIT

For the busy Engineer and Laboratory Technician SEEZAK has Developed a COMPLETE EPOXY KIT with pre-weighed, pre-measured EPOXY Material Packaged for "LONG SHELF LIFE." The Most Popular — Most Used RESINS—BONDING ADHESIVES—CLEANING SOLVENT — MOLD RELEASE — EPOXY STRIPPER and the Right Kind and Right Amount of Pre-weighed Curing Agents IN A COMPLETE KIT.

READY TO USE — EASY TO USE



TECHNICAL MANUAL

To Furnish your Technical Staff With COMPLETE INFORMATION On HOW & WHAT to use — SEEZAK ENGINEERS have prepared this elaborate TECHNICAL MANUAL. That is included with the KIT. It Simplifies Methods necessary to prepare the proper Mixes in Pre-weighed Packages Recommended to ENCAPSULATE — BOND — COAT — ETCH — CLEAN — Your Product or Equipment.

SEEZAK ETCHANT

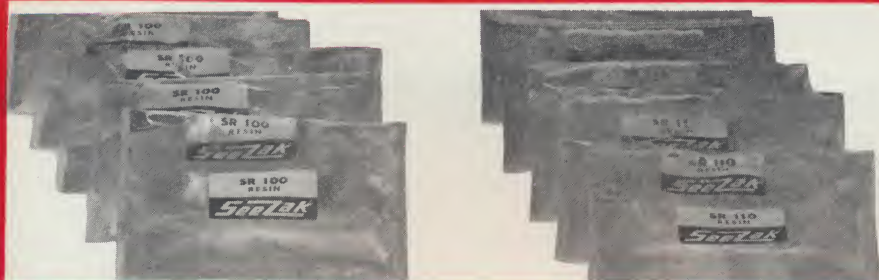
FOR BONDING FLUOROCARBONS
SUCH AS
KEL-F, TEFLON-TFE, TEFLON-FEP, FLUON,
POLYFLON, HALON, KYNAR, ETC.

SEEZAK ETCHANT is a stabilized dispersion of metallic sodium. Its function is to modify the surface of fluorocarbon polymers so that adhesives can be used.





ETCHANT STRIPPER CLEANING SOLVENT



EPOXY RESINS

SR100 and SR110 have been Specially Selected for the SEEZAK KIT as they are Ideal in Solving Difficult Insulation Problems for Potting, Module Coating, or Encapsulation. SR115 may be purchased separately to broaden the use of EPOXY RESINS.

CURING AGENTS

Recent advances have been made whereby it is possible to use just the right Type of HARDENER in Combination With Epoxy Resins, both in stable form at room temperatures which, with or without the application of heat, results in an infusible, fully cured mass.



ADHESIVES

The SEEZAK EPOXY KIT contains 4 individual Kits of Adhesives for Bonding similar and dissimilar materials; Each Adhesive also contains its own specially Prepared and Pre-weighed bottle of CURING AGENT — Thereby Simplifying the procedure of Selecting and Preparing the Right Bonding Adhesive with the correct type and amount of HARDENER needed.

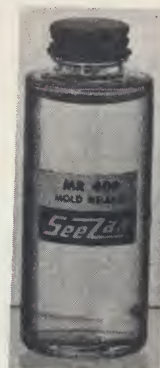
EPOXY STRIPPER

An Ideal Method of recovering expensive Components that are Coated with Epoxy.



MOLD RELEASE

Effective method of easily and quickly releasing from the MOLD, any Potted Material after Casting.



COLD CLEANING SOLVENT

Combines an Optimum of Physical Proportions and a high level of safety To Clean a Product, when soiled with Grease, Tar, Wax, Adhesive or Oil.



Please Note:

All EPOXY Resins, Adhesives, Curing Agents, as well as Cleaning Solvent, Mold Release, and Stripper, may be purchased separately as REFILLS to the KIT, or in PINTS, QUARTS, GALLONS and 5 GALLONS.



PRICES

Suggested Resale

				Case (30)	Pints	Quarts	Gallons	5 Gallons
S E E Z A K E P O X Y K I T				\$29.50				
SR100 Resin	50 Grams (Bags) Each	\$ 1.00		\$22.50	\$3.25	\$ 6.25	\$24.00	\$115.00
SR110 Resin	50 Grams (Bags)	1.00		22.50	3.25	6.25	24.00	115.00
SR115 Resin	50 Grams (Bags)	1.00		22.50	2.75	5.25	19.00	90.00
SC300 Curing Agent	10 Grams (Bottle)	.72			6.75	13.00	50.00	
SC301 Curing Agent	25 Grams (Jar)	.80			4.50	8.50	30.00	
SC302 Curing Agent	11 Grams (Bottle)	.78			9.25	17.50	65.00	
SC304 Curing Agent	2.5 Grams (Bottle)	.50			3.00	5.50	20.00	
SC305 Curing Agent	20 Grams (Bottle)	.75			4.50	8.50	30.00	
SA513 Epoxy Adhesive	1 oz. kit* *Kit	1.25			6.50	12.00	42.00	
SA593 Epoxy Adhesive	1 oz. kit* includes	1.50			7.00	13.00	45.00	
SA594 Epoxy Adhesive	1 oz. kit* Pre-Weighed	1.25			6.00	10.00	35.00	
SA508 Epoxy Adhesive	1 oz. kit* Curing Agent	1.25			4.50	7.50	28.00	
SS600 Epoxy Stripper	4 oz. (Bottle)	1.50					11.50	45.00
MR400 Mold Release	4 oz. (Bottle)	2.50			3.50	6.00	15.00	
CC200 Cold Cleaning Solvent	4 oz. (Bottle)	1.50					12.00	46.00
No. 10 Syringe		.35						
No. 20 Syringe		.50						
Needles		.50						
ETCHANT Complete Kit		7.50						
Technical Manual		.50						

Standard Packages

Kit Replacements

5 Gram Bags Epoxy Case 30
Bottles - Jars 24
Adhesive Kit 24

Etchant 12
Pints 24
Quarts 12
Gallons 4

DISTRIBUTED BY

SEEZAK PRODUCTS, INC. EPOXY PRODUCTS DIVISION

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Los Angeles, California 90016
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YES, WE ARE INTERESTED IN RECEIVING MORE INFORMATION
ABOUT SEEZAK PRODUCTS. *E*

- ☐ PLEASE SEND CATALOG.
- ☐ ADVISE NAME OF REPRESENTATIVE
- ☐ HAVE YOUR REPRESENTATIVE CONTACT ME.

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COMPANY _____

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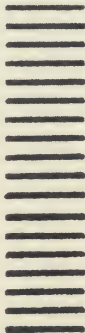
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SEEZAK PRODUCTS INC.

5057 West Washington Boulevard
Los Angeles, California 90016



STICKY PROBLEM?

Let SEEZAK ETCHANT solve them for you when you need to bond any materials to FLUOROCARBONS such as...

KEL-F, TEFLON-TFE, TEFLON-FEP, FLUON, POLYFLON, HALON, KYNAR, ETC.

AN ETCHANT KIT IS NOW AVAILABLE WHICH IS A COMPLETELY NEW AND SCIENTIFICALLY FORMULATED METHOD OF BONDING FLUOROCARBONS.

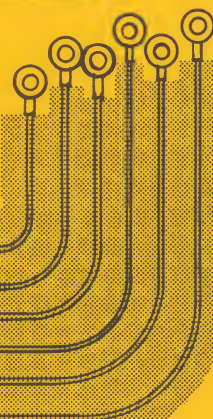
Under normal circumstances, there is no adequate adhesion of any material to such fluorocarbons as TEFLON-TFE, TEFLON-FEP, FLUON, KEL-F, HALON, KYNAR or any other fluorocarbons now under development. This characteristic is inherent in the chemical nature of the fluorocarbon.

Now, SEEZAK Engineers have developed a special ETCHANT KIT which is the first safe "do-it-yourself" method of bonding most materials to fluorocarbon products. This ETCHANT is a stabilized dispersion of metallic sodium. Its function is to modify the surface of fluorocarbon polymers, so that the proper adhesive, which is also contained in the kit, can be used properly.

The SEEZAK ETCHANT KIT comes complete with correctly formulated chemicals to treat the fluorocarbon surfaces as well as an adequate supply of the proper adhesive to complete the bonding job.

SEEZAK ETCHANT is available in Kit Form or Pint containers.

Return the enclosed post-paid card for more information or where to buy the Seezak Etchant Kit.



5057 WEST WASHINGTON BOULEVARD • LOS ANGELES, CALIFORNIA 90016 • PHONE 939-3129 • TWX 213-937-0629



TECHNICAL BULLETIN

SEEZAK ETCHANT

FOR BONDIZING FLUOROCARBONS
SUCH AS
KEL-F, TEFLON-TFE, TEFLON-FEP, FLUON,
POLYFLON, HALON, KYNAR, ETC.

SEEZAK ETCHANT is a stabilized dispersion of metallic sodium. Its function is to modify the surface of fluorocarbon polymers so that adhesives can be used.

Under normal circumstances there is no adequate adhesion of any material to such fluorocarbons as TEFLON-TFE and TEFLON-FEP, FLUON, KEL-F, HALON, KYNAR, and other fluorocarbons now under development. This characteristic is inherent in the chemical nature of the fluorocarbon.

SEEZAK ETCHANT treats the fluorocarbon so that a carbonaceous film is created on the surface. Since SEEZAK ETCHANT is easy to use, selected sections or all the Fluorocarbon material may be treated. The carbonaceous film so created is now the anchor for any applicable adhesive. The adhesive employed is selected based on the end use. Thus, by the use of SEEZAK ETCHANT, any fluorocarbon can be bonded to metals, plastics, glass, ceramics, textiles, wood, rubber, etc.

SEEZAK ETCHANT is the first safe "do-it-yourself" kit for the treatment of fluorocarbon surfaces. It has a high flash point, low vapor pressure and low surface tension. The high flash point prevents ignition of the solvent if water is accidentally added to SEEZAK ETCHANT. The low surface tension allows the SEEZAK ETCHANT to spread and wet the surface uniformly, eliminating "dappling."

SEEZAK ETCHANT may be adapted to spot, batch or continuous operations. For example, TEFLON coated wires or tubing may be treated for cementing or encapsulation at the assembly line or in a preliminary operation. An advantage is that any section of the wire or tubing may be selected.

The same concept applies to fluorocarbon-based printed boards. In addition to possible application in electronics, other industries that desire to use fluorocarbons for low friction, chemical resistance, etc., may find greater utility with SEEZAK ETCHANT and adhesives.

Such eand uses as non-sticking surfaces on furniture, tools, lathes, mills, packaging machinery, skiis, food or bakery slides, laboratories, guides, ice, paint, spray booths, glue, fertilizers, earth, etc., suggest employing SEEZAK ETCHANT for adhering fluorocarbons. The surface, after treatment, may also be dyed or painted for identification or coding.

(continued on next page)



PROCEDURE FOR APPLYING "SEEZAK ETCHANT"

1. **CLEANING POLYMER SURFACE**
Remove all dirt and grease by using perchloroethylene, acetone or similar solvent: rinse with fresh solvent and allow solvent to evaporate.
2. **METHOD OF APPLICATION**
 - a. Shake container gently and briefly, then
 - b. The fluorocarbon can be dipped in the "ETCHANT", brushed or sprayed. Any brush can be used but only fresh solution should be used when brushing.
3. **LENGTH OF TREATMENT**
Period of contact should be 5-15 seconds. Longer periods of contact do not materially increase bond strength. Exposure to air decreases the strength of the solution. Application in a dry nitrogen atmosphere will extend the life of the "ETCHANT" solution. After removal of excess fluid the treated surface will have a light to dark brown appearance.
4. **REMOVING EXCESS FLUID**
After treatment, rinse with water and final washing can be done with detergent. However, make sure that water cannot splash into main body of "ETCHANT". A violent reaction may ensue.
5. **MASKING SECTIONS**
Any conventional masking tape may be used to isolate areas for treatment.
6. **COVERAGE**
One pint of SEEZAK ETCHANT, when used under a dry nitrogen atmosphere, will treat 30-50 square feet of fluorocarbon surface. Actual coverage will depend on localized conditions.

SAFETY PRECAUTIONS

1. Avoid skin contact or breathing vapors. Use protective clothing and goggles.
2. Avoid direct contact of SEEZAK ETCHANT with water, chlorinated hydrocarbons and dry ice. Do not use fire extinguishers containing carbon tetrachloride, acid or water. Use dry soda ash or dry sodium chloride or sodium carbonate for fire extinguishing purposes.
3. Equipment used for dipping should be made of steel, stainless steel, monel metal, nickel or glass. Alkali reactive metals such as zinc, aluminum and tin should never be used.

The information presented herein, while not guaranteed, is to the best of our knowledge, true and accurate. No warranty or guarantee expressed or implied, is made regarding the performance of any product; since the manner of use and conditions of storage and handling are beyond our control. The use of any product or process described herein, shall be construed as a recommendation for the same.

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IMPORTANT PRODUCT ANNOUNCEMENT.....

SEEZAK ETCHANT is now available in PINT Containers. It will carry the Part No. SE-100 and will have a RESALE PRICE of \$19.95.

The packaging of the ETCHANT into PINT Containers will now make it possible for all SEEZAK customers to not only purchase the ETCHANT KIT but additional quantities of ETCHANT material only.

Also, it will now be possible for SEEZAK customers to select the proper bonding adhesive from SEEZAK'S broad line of materials. For more information on the entire SEEZAK EPOXY LINE, contact your SEEZAK Representative.

12/15/66